Epitomes
Important Advances in Clinical Medicine

Otolaryngology/Head and Neck Surgery

The Scientific Board of the California Medical Association presents the following inventory of items of progress in otolaryngology/head and neck surgery. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist busy practitioners, students, research workers or scholars to stay abreast of these items of progress in otolaryngology/head and neck surgery that have recently achieved a substantial degree of authoritative acceptance, whether in their own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Otolaryngology/Head and Neck Surgery of the California Medical Association and the summaries were prepared under its direction.

Reprint requests to Division of Scientific and Educational Activities,
California Medical Association, PO Box 7690, San Francisco, CA 94120-7690

Anosmia—Evaluation and Treatment

AS MANY AS 2 million Americans have lost their sense of smell. Many of these patients have sought advice from primary care physicians and specialists, never receiving satisfying explanations. Over the past two years, the Nasal Dysfunction Clinic at the University of California San Diego Medical Center has had the opportunity to fully evaluate 63 patients. The evaluation included an age-adjusted olfactory threshold and odor identification test, rhinomanometry, nasal cytology, nasal endoscopy, computed tomographic (CT) scan and a trial of medical treatment. In all, 33% (21) of the patients had anosmia or hyposmia due to inflammatory nasal disorders, 32% (20) due to postviral olfactory epithelial destruction, 11% (7) due to exposure to toxins, 10% (6) due to trauma, 5% (3) due to congenital disorders, 5% from miscellaneous causes and 5% were psychiatric in nature.

The most interesting observations from this experience are as follows: First, the loss of smell is considered by all who suffer it a major disability. For these, food has lost its taste and, in a society that structures socialization around eating, this is a major handicap. Additionally, these patients cannot smell smoke and are not readily able to detect fires. Lastly, these persons cannot smell spoiled and rotten food and are at a higher risk for food poisoning.

CT scans were found necessary to evaluate the paranasal sinuses and were found to be superior to plain films in identifying ethmoidal inflammatory disorders. A short course of high doses of prednisone often returns the sense of smell to those whose disorder has an inflammatory cause and was found to be a useful diagnostic test. Neither zinc nor antihistamines were found to be useful treatments for patients suffering from anosmia.

Recommendations are that everyone suffering from anosmia have a complete evaluation. Those with an inflammatory cause are potentially correctable; those with other causes are not correctable, and patients need to be informed of their prognosis. All patients need to be advised of the necessity for smoke detectors and, for those using natural gas, propane or other gaseous substances, the need for in-house gas detectors. All need to be advised about the risk of spoiled foods.

Finally, some rehabilitation is possible, and just as the blind have learned to read with their fingers, those without smell can learn to taste through other senses.

TERENCE M. DAVIDSON, MD
San Diego

REFERENCES

Doty RL: A review of olfactory dysfunctions in man. Am J Otolaryngol 1979; 1:57-79

Report of the Panel on Communicative Disorders to the National Advisory Neurological and Communicative Disorders and Stroke Council, US Dept of Health, Education and Welfare publication No. (NIH) 79-1914. Public Health Service, 1979, p 319

Schiffman S, Orlandi M, Erickson RP: Changes in taste and smell with age: Biological aspects, *In* Ordy JM, Brizzee K (Eds): Sensory Systems and Communication in the Elderly—Vol 10, Aging. New York, Raven Press, 1979, pp 247-268

Microscopically Oriented Histologic Sections for Head and Neck Mucosal Cancer

MICROSCOPICALLY oriented histologic sections (MOHS) is a technique for frozen-section analysis of surgical margins. With the traditional pathologic orientation at frozen section, as little as 1/1,000th of a surgical margin may be examined, whereas with the MOHS approach, 100% of the surgical margin is purported to be examined. This technique has been successfully applied to the resection of aggressive nonmelanoma skin cancer and has become the standard of care for such lesions. This technique has now been applied to the local control of head and neck epidermoid cancers involving mucosal surfaces of the mouth, throat and upper airway. Experience at the University of California at San Diego Medical Center of 93 patients with two-year follow-up showed that the technique was highly effective in reducing the incidence of local recurrence. While there are no good data bases with which to compare these findings, and prospective studies are difficult to coordinate, it is recognized that 50% of the failures in the control of head and neck cancer are due to failure to resect and control local disease. In the 93 patients followed for two years, only 9 cases of local recurrence were reported, 3 of which were successfully treated with subsequent procedures.

The most important information to come out of this study concerned the biologic behavior of these tumors. It was observed that the tumors grew as an incontinuity growth and that